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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR .	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,464	12/20/2005	Johannis Friso Rendert Blacquiere	NL 030754	8220
	7590 02/13/2008 LLECTUAL PROPER	EXAMINER		
P.O. BOX 3001	I	DUDEK JR, EDWARD J		
BRIARCLIFF	MANOR, NY 10510	•	ART UNIT	PAPER NUMBER
			2186	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary		Application No.	Applicant(s)			
		10/561,464	BLACQUIERE ET AL.			
		Examiner	Art Unit			
		Edward J. Dudek	2186			
Period fo	The MAILING DATE of this communication apports Reply	ears on the cover sheet with the c	orrespondence address			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Operiod for reply is specified above, the maximum statutory period we are to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become AB ANDONE	.  the mailing date of this communication.  (35 U.S.C. § 133).			
Status	•					
1)⊠	Responsive to communication(s) filed on 20 De	ecember 2005.				
2a)	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
•	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposit	ion of Claims					
5)□ 6)⊠ 7)□	Claim(s) 1-11 is/are pending in the application.  4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed.  Claim(s) 1-11 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or	vn from consideration.				
Applicati	ion Papers					
10)⊠	The specification is objected to by the Examiner The drawing(s) filed on <u>20 December 2005</u> is/an Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction The oath or declaration is objected to by the Examiner	re: a) ☐ accepted or b) ☒ object drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). sected to. See 37 CFR 1.121(d).			
Priority (	under 35 U.S.C. § 119					
12) ⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ⊠ All b) ☐ Some * c) ☐ None of:  1. ☑ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
2) Notice 3) Information	ot <b>(s)</b> Coe of References Cited (PTO-892) Coe of Draftsperson's Patent Drawing Review (PTO-948) Coe of Draftsperson's Patement(s) (PTO/SB/08) Coer No(s)/Mail Date 05/15/07.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	nte			

#### **DETAILED ACTION**

This Office Action is responsive to application #10/561464 filed on 20 December 2005.

Claims 1-11 are pending and have been presented for examination.

# **Drawings**

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 78. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

# Specification

The disclosure is objected to because of the following informalities: page 11, lines 25-34 discuss the various configurations of user data and spare areas. This

section identifies a first storage section (58) as having a contiguous layout for streaming data, which corresponds correctly to figure 6. This section further describes another storage section (59) as having a contiguous layout for non-streaming information. This does not coincide with figure 6. It is suggested this section be identified as having a distributed layout (page 11, line 31), as this will coincide with figure 6 and the invention as a whole.

Appropriate correction is required.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Regarding claims 1 and 10, the phrase "like" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claims 2-9 and 11 are also defective as they depend from claims 1 and 10 respectively.

# Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 11 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The limitation of computer program product can be

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reasonable interpreted to be software, per se. Software *per se* is merely function descriptive material, and is non-statutory.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 7, and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sims (U.S. Patent #7,058,852) in view of Gotoh (U.S. Patent #6,314,235).

As per claim 1: Sims discloses a device for recording information in blocks having logical addresses on a record carrier, which device comprises recording means (22) for recording marks in a track on the record carrier representing the information (see figure 3, element 351), and control means (20) for controlling the recording by locating each block at a physical address in the track (see figure 3, element 350 and column 17 line 62 thru column 18 line 13), the control means comprising addressing means (31) for translating the logical addresses into the physical addresses and vice versa in dependence of defect management information (see column 17 line 62 thru column 18 line 13), defect management means (32) for detecting defects and maintaining the defect management information (see column 9, lines 7-12), the defect management information including assignment information indicative of assignment of

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physical addresses in first parts of the track to at least one user data area, assignment of physical addresses in second parts of the track to defect management areas and assignment of the defect management information to the defect management areas (see column 13, lines 47-62), and the defect management information including remapping information indicative for translating a logical address initially mapped to a physical address exhibiting a defect to an alternate physical address in a defect management area (see column 11, lines 28-33), and defect management area reassignment means (34) for changing said assignment information in dependence of the data type (see column 10 line 58 thru column 11 line 28). Sims does not disclose data type detection means (33) for detecting a data type of recorded information, in particular the type being streaming for real-time data like digitally encoded video, or non-streaming for random data like computer data files. Gotoh discloses a system that is capable of determining the type of data that is being recorded, and determining if the data is AV data or computer data (see column 9, lines 1-16). Depending on the type of data being stored on the storage medium, the way the defective blocks are allocated are changed so that the performance requirements for real-time or streaming data can be satisfied (see column 2, lines 1-16). The system disclosed by Sims enables user to set the type of data being stored on the medium. It would have been obvious to a person having ordinary skill in the art to which said subject matter pertains to have modified the system disclosed by Sims, by adding the functionality of having the device detect the type of data being stored on the storage medium, since the type of data stored will determine the performance required, as taught by Gotoh.

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As per claim 2: wherein the defect management area reassignment means (34) are for changing said assignment information from a distributed layout having the first parts and the second parts of the track alternatingly arranged to a contiguous layout having a substantially uninterrupted user data area in dependence of the data type being streaming, or vice versa (see column 10 line 58 thru column 11 line 28).

As per claim 3: wherein the defect management area reassignment means (34) are for changing said assignment information for a first physical address range to the distributed layout and for a second physical address range to the contiguous layout, the first physical address range containing information of the non-streaming type and the second physical address range containing information of the streaming type (see column 10 line 58 thru column 11 line 28 and column 12, lines 30-37).

As per claim 4: wherein the defect management area reassignment means (34) are for assigning a defect to a first defect management area for information of the streaming type, or to a second defect management area for information of the non-streaming type (see column 10 line 58 thru column 11 line 28, since each area that is defined has a user area and a spare area, it is inherent that the defect is remapped to that spare area that is associated with the user data area).

As per claim 7: wherein the defect management area reassignment means (34) are changing the assigning of physical address to the first defect management area for information of the streaming type, or to the second defect management area for information of the non-streaming type in dependence of information recorded or defects detected on the record carrier (see column 10 line 58 thru column 11 line 28, since

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each area that is defined has a user area and a spare area, it is inherent that the defect is remapped to that spare area that is associated with the user data area).

As per claim 9: wherein the data type detection means (33) are for detecting the data type by monitoring commands for recording or retrieving information, by retrieving record carrier information indicative of the data type, by detecting a data type from the data structure of the recorded information, or by detecting file system information, or by communicating with a host device (see Gotoh column 9, lines 1-16).

As per claims 10 and 11: Sims discloses a method of defect management for recording of information in blocks having logical addresses on a record carrier by locating each block at a physical address in the track (see column 7, lines 30-35), translating the logical addresses into the physical addresses and vice versa in dependence of defect management information (see column 17 line 62 thru column 18 line 13), detecting defects and maintaining the defect management information (see column 9, lines 7-12), the defect management information including assignment information indicative of assignment of physical addresses in first parts of the track to at least one user data area, assignment of physical addresses in second parts of the track to defect management areas and assignment of the defect management information to the defect management areas (see column 13, lines 47-62), and the defect management information including remapping information indicative for translating a logical address initially mapped to a physical address exhibiting a defect to an alternate

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physical address in a defect management area (see column 11, lines 28-33), the method comprising changing said assignment information in dependence of the data type (see column 10 line 58 thru column 11 line 28). Sims does not disclose data type detection means (33) for detecting a data type of recorded information, in particular the type being streaming for real-time data like digitally encoded video, or nonstreaming for random data like computer data files. Gotoh discloses a system that is capable of determining the type of data that is being recorded, and determining if the data is AV data or computer data (see column 9, lines 1-16). Depending on the type of data being stored on the storage medium, the way the defective blocks are allocated are changed so that the performance requirements for real-time or streaming data can be satisfied (see column 2, lines 1-16). The system disclosed by Sims enables user to set the type of data being stored on the medium. It would have been obvious to a person having ordinary skill in the art to which said subject matter pertains to have modified the system disclosed by Sims, by adding the functionality of having the device detect the type of data being stored on the storage medium, since the type of data stored will determine the performance required, as taught by Gotoh.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sims (U.S. Patent #7,058,852) and Gotoh (U.S. Patent #6,314,235) as applied to claims 1-4, 7, and 9-11 above, and further in view of Gotoh (U.S. Patent Application Publication #2003/0191980).

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As per claim 8: the combination of Sims and Gotoh disclose all the limitations of claim 1 as discussed above. The combination fails to disclose the defect management area reassignment means (34) are for, in the event that the translation of logical address to physical address of previously recorded blocks is affected by said reassignment, moving the previously recorded blocks to a different physical address that after the reassignment corresponds to the logical address, and/or by adapting file management information by amending the logical addresses of the affected of previously recoded blocks. Gotoh discloses defect management whereby another spare area for remapping defective blocks is needed (see [0215]). The system determines if there is currently data stored in the area where the new spare area is going to be located, and if so the data is moved to another area of the disk so that the data is not lost and the spare area can be allocated in the most beneficial spot (see [0219]-[0220]). It would have been obvious to a person having ordinary skill in the art to which said subject matter pertains to have moved previously recorded blocks in the area where the new spare area is going to be located to another area on the medium, in the system disclosed by Sims and Gotoh, to allow the spare area to be located in the most beneficial area, as taught by Gotoh.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward J. Dudek whose telephone number is 571-270-

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1030. The examiner can normally be reached on Mon thru Thur 7:30-5:00pm Sec. Fri 7:30-4 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Kim can be reached on 571-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. J. D./ Examiner, Art Unit 2186

February 7, 2008

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100